Granular Matter (2008) 10:155
DOI 10.1007/s10035-007-0079-6

EDITORIAL

Editorial

Hans J. Herrmann

Published online: 29 November 2007

On May 18, 2007 the most prominent member of our Editorial Board, Pierre Gilles de Gennes, passed away. Besides the multiple fundamental contributions he made on superconductivity, polymers, and liquid crystals, for which he received the Nobel prize in 1991, he was one of the initiators of the modern interest of physicists in granular matter. Ultimately, this interest was the driving motivation to found the journal Granular Matter.

In the late 1980s, de Gennes wondered about the heaping of vibrated sand which had remained largely unexplained since it was first described by Faraday in 1831. As was typical for him, he encouraged experimentalists, in this case Evesque and Rajchenbach, to test his theoretical explanations. This was a key factor in bringing sand into physics labs, and helped started a wave of enthusiasm. One example of this enthusiasm is that only a few years later, scientists in France formed a research network (GdR) joining 18 French institutions doing experiments and theory for granular matter. Legendary was de Gennes' course at College de France on granular materials, in which he presented much original work for the first time in front of an overcrowded auditorium.

Several of his lectures immediately became publications.

Using his genius for simple models, he attacked multiple granular riddles, including the surface shape in filling silos, size segregation, the splitting of force lines, the rotating drum, and the angle of repose. Last but not least, he invested his pedagogical talent to popularize granular media in high schools, and brought their novelty to a broader public through a spectrum of media, including movies, television interviews, and articles.

Hans Herrmann

H. J. Herrmann (✉)
ETH Zürich, Zurich, Switzerland
e-mail: hjherrmann@ethz.ch